# Factors Influencing the General Movement of Prices in Great Britain

By E. R. Hawkins

The wartime experience with price control in Great Britain is of interest because some of the problems confronted there differ from our own only in degree and circumstance. Because of relatively greater unused capacity here, our price problem has not as yet become so acute; however, the basic forces at work are the same. The present article and a subsequent one will examine the causes of the price advance in Great Britain, describe the various measures that have been adopted to control prices, and evaluate the effectiveness of those controls.

From the outbreak of the war to September 1941 the British Board of Trade's wholesale price index rose 57 percent (fig. 6). The Ministry of Labour's cost-of-living index advanced 28 percent (fig. 7). The fundamental causes of these large price increases have been, of course, the increased demand for goods and decreased civilian supplies. These have been persistent forces since the beginning of the war, but the relative importance of various aspects of these basic causes has been different in different periods, partly as a result of deliberate government policy.

Three periods may be distinguished: the first, from the outbreak of the war until the end of 1939, was characterized by rapid price advances caused chiefly by depreciation of the pound sterling and rising prices of imports; the second period, covering roughly the year 1940, witnessed further substantial price rises, resulting primarily from increased government expenditures for the war effort, particularly after the fall of France; in the third period, 1941 to date, price increases have been moderate, largely as a result of the various control measures to be discussed.

## Rise in Import Prices at Outbreak of War

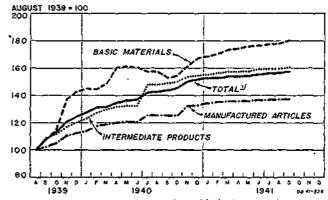
Wholesale prices rose 25 percent in the first four months of the war. Figure 6 indicates that this advance was led by basic material prices, which increased about 40 percent. Virtually all of these basic materials (except coal and iron ore) are imported by Great Britain.

The reasons for the rise in prices of British imports are complex. One of the chief factors was certainly the depreciation of sterling. For some months prior to the outbreak of war, the British Equalization Fund had held the pound in terms of dollars at around \$4.68. On August 25, 1939, the Fund suspended this intervention

and the rate fell to \$4.20 on Saturday, September 2. On September 5, 1939, the Bank of England established an official selling rate for United States dollars at \$4.02 and on January 8, 1940, raised it to \$4.02½. This depreciation of the pound, of course, resulted in higher sterling prices for imported goods.

The question of whether this depreciation of the pound could result in a redress in the trade balance is not easy to resolve. The balance of payments of the United Kingdom had shown substantial deficits on trade and service accounts in preceding years. Whatever judgment might be rendered upon the efficacy of currency depreciation as a stimulus to exports under other circumstances, it appears that in the war situation

Figure 6.—Indexes of Wholesale Prices in the United Kingdom



Includes some items not shown separately on this chart.

Source: Indexes were recomputed with August 1939 as base from data published by the Board of Trade, London.

difficulties of supply and transport precluded any increase in exports from the United Kingdom.<sup>2</sup>

However this may be, a result of depreciation was a rise in the cost in pounds of acquiring war supplies outside the sterling area, and a direct stimulus toward an internal price rise. The effect of this stimulus involves the whole problem of war finance, particularly the expansion of government expenditures in relation to tax revenues and loans. In the present connection the significant point is that general government fiscal policy did permit the exchange depreciation to result in domestic price advances.

A second factor affecting the prices of imports in this period was that prices of British imports were rising

I This is the first of two articles on the control of prices in Great Britain. It deals with the over-all fiscal and indirect controls of the general price level. The second, which will appear in an early issue, is concerned with the direct control of specific prices.

<sup>&</sup>lt;sup>2</sup> Mastry, August, "The Depreciation of the Pound Sterling," Survey of Current Business, November 1939, p. 11. See also Balogh, T., "Foreign Exchange and Export Trade Policy," Economic Journal, March 1940.

in their countries of origin. This price rise was not, of course, independent of British developments. In large part it was a speculative rise induced by the outbreak of war. Its significance is that it meant greater British expenditures for imported goods.

Between mid-August and the end of December, the Bank of England's index of 15 basic commodity prices, computed separately for the United Kingdom and the United States, rose 27 percent and 20 percent, respectively. (See table 1.) This comparison is significant, for the items included in this index are ones that bulk large in Britain's imports, and are heavily weighted in the Board of Trade's wholesale price index.

A third factor influencing the price of imports was the sharp increase in shipping and insurance costs in the early months of the war. The British government fixed rates for British-owned tramps, but had to raise these rates 30 percent on November 1, 1939.<sup>3</sup> Later the government requisitioned British-owned vessels and in effect leased them from their owners on the basis of fixed schedules of monthly hire.

Table 1.—Wholesale Prices of 15 Basic Commodities
[Week ended Aug. 19, 1939=100. Index numbers are
for last full week in each month]

Year and month	United Kingdom	United States	Year and month	United Kingdom	United States
1939 August 19 August 26 September October November	100.0 101.5 110.3 113.4 120.0	100. 0 101. 1 118. 2 116. 8 115. 7	December	138, 9 134, 6 134, 6 135, 6 133, 6	105. 2 108. 8 114. 1 114. 9 115. 7
December	126. 8 129. 6 132. 4 132. 8 134. 0 137. 6 137. 7 138. 2	119. 5 116. 2 115. 9 133. 6 117. 0 116. 5 110. 3	1941 January February Merch April May June July August September	133. 8 134. 5 137. 0 137. 5 136. 3 136. 2 136. 4 136. 7	118, 7 118, 7 126, 6 128, 5 133, 6 137, 5 137, 8 142, 1 143, 8

Source: Bank of England Statistical Summary. The items included are identical for the United States index and the United Kingdom index, except that the former includes coffee instead of tea. The other 14 items are wheat, maize, sugar, beef, cotton-seed oil, pig iron, copper, lead, tin, cotton, wool tops, hides, linseed, and rubber.

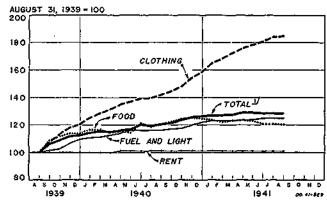
While it appears likely that the immediate cause of the initial rapid increase in British wholesale prices was the increase in prices of imported goods, resulting from higher world prices, foreign exchange depreciation, and increased shipping costs, these factors are not all "recurring," and therefore do not account for the subsequent British price rise. During 1940, the Board of Trade's general wholesale price index advanced an additional 19 percent, while the cost-of-living index rose about 11 percent.

## Import Price Advances Insignificant in 1940.

World prices of basic raw materials did not rise appreciably during 1940. The British section of The Bank of England's index of 15 basic commodity prices rose about 5 percent, while the index for the United States fell about 3 percent during the same period.

England cannot, of course, control world prices of basic commodities, but it has stabilized many import prices through long-term contracts with the sterling-area countries. In 1939 the British government agreed to buy the entire New Zealand-Australian wool clip for the duration of the war and 1 year thereafter at fixed prices, subject to negotiation each year. Bacon and cheese are bought from Canada at fixed prices a little under the market prices. Dried fruit is bought from the Union of South Africa, in lump-sum purchases. In some cases the Dominion governments sell these goods to England at lower prices than the producers receive.

Figure 7.—Indexes of Cost of Living, End of the Month, in the United Kingdom



Includes some items not shown separately on this chart.

Source: Indexes were recomputed with August 31, 1939 as base from data published by the Ministry of Labour, London.

Shortly after the outbreak of war, Great Britain contracted to buy the whole of the surplus stocks of copper, refined zinc, and lead of Australia, 80 percent of the copper and about 90 percent of the aluminum produced by Canada, and large amounts of the Rhodesian copper—all at pre-war prices. By these contracts, the Empire producers were assured a market and shipping facilities, and Great Britain was assured supplies at stable prices.

Foreign exchange rates did not contribute significantly to the 1940 British price rise, for the official rate of \$4.025-\$4.035 was not reduced during the year.

Shipping and insurance costs, however, continued to increase. In January 1940 war surcharges on cargo insurance were imposed upon all shipments within the combat zone. On January 1, 1940, the war risk insurance rates on cargoes to west coast United Kingdom ports from most North and South American points was 5 percent of their insured value; the rate was raised to 10 percent in September. On March 1, 1940, a new schedule of rates for government leases of requisitioned ships became effective, with higher rates than those previously specified. At the close of the year a 15-percent increase in in-bound shipping freight rates was put into effect by the Ministry of Shipping.<sup>5</sup>

<sup>&</sup>lt;sup>2</sup> "Wartime Control of Ocean Freight Rates in Foreign Trade," A. E. Sanderson, Transportation Division, Department of Commerce, 1940. Trade Promotion Series, No. 212.

<sup>4</sup> See Backman, Jules, and Fishman, Leo, "British War-Time Control of Copper, Lead and Zine," Quarterly Journal of Economics, February 1941; Ogdon, Montell, "Some Objectives and Problems of Price Control." Foreign Agriculture, July 1941; also "Foreign Commerce Weekly," July 12, 1941, p. 18.

I Foreign Commerce Weekly, November 9, 1940.

Additional evidence that the rise in shipping costs was a contributing factor to British price advances in 1940 is found in the fact that the subindex for foods in the Bank of England's index of basic commodity prices in the United Kingdom continued to rise while actual quotations on a number of important foods in their country of origin were falling. Internal factors, including Government control, may have affected the British prices, but since the index is composed largely of imported goods, at wholesale prices, it is likely that the rise in shipping costs was an important factor in the increased spread between prices in Great Britain and prices in the country of origin.

The rise in shipping costs does not alone, however, account for the entire rise in prices in 1940. Evidence that the continuing price advance stemmed, in the main, from some other source was present in the climbing price quotations for purely domestic goods: For example, coal prices increased about 15 percent during 1940.

As suggested previously, the reason for these price increases lay in the increase in demand for goods relative to the supply.

## **Decreased Civilian Supplies**

The total supply of goods available in the United Kingdom has undoubtedly increased, despite the reduction in many imports and the growth of the armed forces. Supplies available for consumers, however, have decreased. Although output statistics are no longer made public, competent observers estimate the increase in total production at from 5 to 10 percent. The total supply of steel is estimated to be greater than at any time before the war. Securing adequate supplies for the war effort and for the maintenance of the civilian population is the basic need, to which financial control is merely a camp follower. Examined from the standpoint of price control, however, increasing supply is one method of limiting price increases.

Heavier imports afford one source of expanded supplies. Contracts with the countries of the sterling area, mentioned above, have been of extreme importance in assuring much of the needed foodstuffs and raw material, at least at their source. Lend-lease aid to be mentioned later, did not, of course, constitute a factor in the supply situation in 1940.

England has also made great efforts to increase domestic production. The Ministry of Food has subsidized domestic agricultural production by buying the entire output at high prices, and taking a loss on resale to distributors.<sup>8</sup> Food acreage has been increased by ploughing 3,750,000 acres and by bringing 100,000–150,000 acres of submarginal land into production.

(The cultivated area in the United Kingdom in 1939 was 60,300,000 acres.)

Notwithstanding the expansion of over-all output, it has been necessary to make substantial reductions in the supplies of goods available for the civilian markets. This has been effected through Government ownership of raw materials, control of food by the Ministry of Food, and the operation of Limitation of Supplies Orders.

#### Limitation of Supplies Orders.

The Limitation of Supplies Orders restrict manufacturers and wholesalers of most non-food consumers' goods in their sales to retailers. The purpose of these orders, which are issued by the Board of Trade, is to divert resources from the production of goods for domestic consumption to production for war purposes and that part of the export trade necessary to obtain needed exchange abroad. In this sense, the orders perform a function similar to that of the priorities mechanism in this country.

The first general order, issued in June 1940, restricted sales to retailers for the period June 6-November 30, 1940, to two-thirds of the value of such goods supplied in the base period of 6 months ending November 30, 1939. The products covered included: clothing, toys, musical instruments, office appliances, cosmetics and toilet preparations, carpeting, pottery, luggage, cameras, jewelry, vacuum cleaners, refrigerators, washing machines, wringers, lawn mowers, dish washers, metal furniture, furniture made of cane or wicker, mattresses, and other household goods.

A new Order, effective December 1, 1940, added many goods to the controlled list, sharply reduced quotas, and set up a new base period, December 1, 1939, to May 31, 1940.<sup>10</sup>

Some of the quotas, as they stood for the period June 1-November 30, 1941, are as follows: (the percentage figures represent the percentage of sales in the base period that may now be supplied) mattresses, carpets, saucepans, razor blades, fibre suitcases, 50 percent; pottery, 40 percent; luggage, wicker or cane furniture, 33½ percent; glassware, 26½ percent; metal furniture, cutlery, pots and pans, cameras, radios, gramaphones, electric appliances, refrigerators, vacuum cleaners, fans, mowers, washers, 25 percent.

It should be observed that these quotas are in terms of money values of goods. In view of the rise in prices, the limitation on physical volume is larger than these figures indicate.

Limitation of textile sales in the home market was accomplished through separate Limitation of Supplies Orders. For the period April 1 to September 1941, the permitted quotas were, for rayon, 40 percent of the sales in the period April 1 to September 30, 1939, and

<sup>&</sup>lt;sup>a</sup> Kaldor, N., "The White Paper on National Income," Economic Journal, June-September 1941; Pigou, A. C., "War Finance and Inflation," Economic Journal, December 1940.

<sup>7</sup> Economist, August 23, 1947.

Ogdon, op. cit.

<sup>&</sup>lt;sup>9</sup> Limitation of Supplies (Miscellaneous) (No. 5) Order, 1949 (S. R. & O. 1940, No. 2031).

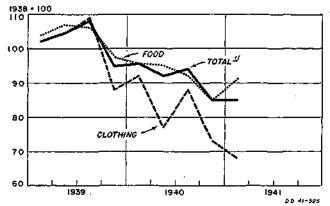
<sup>&</sup>lt;sup>10</sup> Limitation of Supplies (Miscellaneous) (No. 5) Order, 1940 (S. R. & O. 1949, No. 2031).

for cotton, linear, and silk, 20 percent. The quantity of textile output and sales is now controlled largely through a clothing rationing system, the Limitation of Supplies Orders having been modified to exempt clothing wholesalers from restriction and to free manufacturers from quota limitations on garments and household goods.

Certain items may not be produced at all for the domestic market, e. g., automobiles, wooden furniture and silk stockings.

As a result of these various restrictions, the physical volume of sales decreased about 20 percent between the beginning of the war and the first quarter of 1941 (fig. 8).

Figure 8.—Indexes of Real Civilian Consumption in Great Britain, Adjusted for Seasonal Variations



1 Includes some items not shown separately on this chart.

Source: G. D. N. Worswick in the Bulletin of the Institute of Statistics, Oxford.

The volume of food consumption fell about 13 percent. It should be remembered that about 3 million persons were withdrawn from the civilian population to the armed forces. Allowing for a 5 to 7 percent decline in civilian population, it may be calculated that civilian consumption per head fell about 13 percent for all goods, 8 percent (as a minimum) for food, and 35 percent for clothing.<sup>11</sup>

By the summer of 1941, the volume of goods (other than food) available for sale to consumers has decreased 50 percent, according to an estimate of the Henderson Committee on Retail Trade.<sup>12</sup> This estimate appears high, in view of the sales data presented in figure 3. While the Henderson Committee did not explain the basis of its estimate, it stated that the full effect of the reduction has not yet been felt in retail sales because of the existence of a "cushion" of accumulated stocks, now rapidly diminishing.

Stocks are estimated to have been reduced at an annual rate of about 17 percent during the first half of

22 Board of Trade Journal, August 9, 1941.

the second year of war.<sup>13</sup> Reduction of stocks has, of course, been a factor retarding price advances. Output of consumers' goods decreased so much, however, that a net decrease in the physical volume of goods available for sale resulted, with consequent effects on the level of prices.

#### **Increased Demand**

The chief inflationary force in Great Britain, as in this country, has been the rapid expansion of Government expenditure. Government expenditure would not raise prices if it were accompanied by an equivalent decrease in civilian expenditure, e.g., if it were financed entirely by taxation, or if it were accompanied by a proportionate increase in production. Unless appropriate steps are taken to bring about decreased consumer spending, however, such spending is actually increased. Government monetary expenditures must become income to private individuals and companies, thus increasing their effective demand. If excess plant and labor are available for an adequate expansion of output, this increase in purchasing power need not result in increased prices. One of the principal distinctions between the British situation and that of the United States has thus far been the relatively greater unused capacity of this country, making it possible to reduce the pressure on prices by achieving an over-all expansion of supplies.

The Government might ensure a decrease in civilian expenditure by taking up the necessary purchasing power by taxation. Since this is not expedient politically, wartime governmental policy usually involves an attempt to absorb a portion of civilian purchasing power by borrowing. Inevitably, real personal consumption must be reduced by the amount by which the increase in Government consumption exceeds the expansion of total supplies. If the necessary decline in consumption is not secured by taxation and savings, it will be brought about by rising prices, as the Government bids away the resources it requires.

The problem of preventing this price rise is different from the purely budgetary problem of the Government. The Government must balance its expenditure in some way. It can do this by taxation, borrowing, or issuing fiduciary money. But the borrowing could be from banks, and represent an increase in credit rather than real savings. This answers the Government budget problem, but does not solve the problem of preventing inflation. To prevent inflation it is necessary that Government borrowing represent "real savings," i. e., a reduction in total civilian consumption.

The inflationary gap is the difference between the volume of purchasing power in the hands of the civilian population and the sum of the goods and services available, valued at existing prices. If such a gap

<sup>11</sup> Worswick, G. D. N., "Turn-over and Population Movements," Institute of Statistics, Oxford, Bulletin, vol. 3, n. 10, July 19, 1941. Another estimate, however, is that civilian consumption per head fell 10 percent for all goods and 15 percent for food, in the first year of war. See Maizels, Alfred, "Consumption, Investment, and National Expenditure in War Time," Economica, May 1941.

<sup>13</sup> Kaldor, op. cit.

exists, it represents the amount by which taxation or savings or the supply of goods must be increased in order to avoid inflation.

#### Government Finance, to April 1941.

The first war budget, revising the original estimates for the year ended March 31, 1940, was presented three weeks after the outbreak of war. Expenditure was estimated at £1,933 million as compared with £1,285 million, the figure in the original budget for that year. Actual expenditure for the fiscal year, which included seven months of war, was only £1,810 million (excluding payment to Sinking Funds). (See table 2.)

Table 2.—British Government Revenue and Expenditures by Quarters

[Millions of pounds sterling]

Year and quarter	Expend- iture	Revenue	Deficit	
1939: October-December	543	- 207	336	
1940: January-March.	OMD I	505	119	
April-June.		188	507	
July-September.		264	651	
October-December.		300	798	
1941: January-March	1, 159	656	503	
	1, 074	319	755	
	1, 162	419	743	
Fiscal year ended March: 1940	1, 810	I, 049	761	
	3, 867	1, 408	2,459	
	2, 236	738	1,498	

Source: Bank of England Statistical Summary.

During 1940 governmental expenditures mounted rapidly, sustaining the price advances that had started in the early months of the war. The second war budget, presented in April 1940, estimated expenditure for 1940-41 at £2,667 million, which represented an increase of only about 10 percent over the rate of expenditure then attained. The inadequacy of this estimate was realized after the fall of France; a supplementary budget presented on July 23 increased the expenditure estimate to £3,467 million. Actual expenditures increased from £1,810 million in 1939-40 to £3,367 million in 1940-41.

Figure 9 shows the percent of Government expenditure covered by taxation in 1938 and in the four quarters of 1940. The remainder of the Government expenditure was covered by borrowing, in some form. The figure (and table 3 which presents the data upon which the figure is based) indicates that the Government has been taking an increasing share of the total national income—from 18 percent in 1938 to 47 percent in the fourth quarter of 1940.<sup>14</sup> The share of Government expenditure (on goods and services) covered by Government revenue decreased from 104 percent in 1938 to 30 percent in the fourth quarter of 1940.

In summarizing the fiscal experience of the first 18 months of war, the Government figured the relationship of its purely budgetary accounts to the national economy. (See table 4.) Governmental expenditures in the first 18 months of the war (September 1, 1939, to February 1941) totaled £4,671 million. Revenue (including extra-budgetary receipts and proceeds from the sale of Exchange Equalization Funds) totaled £2,576 million, leaving a "deficit" of £2,095 million which was financed by borrowing. Where did this £2,095 million come from?

As shown in table 4, the Government estimated that £1,021 million came from sale of assets in foreign countries, (in addition to the £388 million that the Government directly realized from the sale of pre-war resources of the Exchange Equalization Fund), £120 million from increase of funds held against taxes accrued but not yet due, £403 million from net debt retirement of institutions, local authorities, and companies, and £300 million from reinvestment of domestic capital. The balance, £640 million (a residual amount), was assumed to represent personal savings.

The fact that the accounts balance does not prove the absence of an inflationary impetus from public spending, for the national accounts will always balance. "Inflation" does not appear as one of the accounts, but

14 The national income figure used in this calculation (column 4 in table 3) is a gross figure, equalling the total of Government expenditure and personal expenditure (columns 5 and 7). Civilians and the Government, together, were able to spend more than the income derived from current production of goods and services (column 1) because of drawing upon foreign and domestic capital. Indirect taxes (column 3) must be added to net national income and draft on capital in order to secure a figure for gross national income equal to the total amount spent, because expenditures are at market prices, which include these taxes.

Table 3.—Distribution of the British National Income

[Millions of pounds sterling]

	<del></del>			<u> </u>		<u> </u>	<del></del>	<del> </del>	<del></del>	<del></del>
	1	2	8	4	5	6	7	8	8	10
Year and quarter	Net national in- come (before direct taxes)	Net drait on foreign and domestic caltpal	Indirect taxes and rates	Gross national income (1+2+3= 5+7)	Personal expenditures	Percent of gross national income (5÷4)	Government expenditures (on goods and services)	Percent of gross national income (7÷4)	Government revenue	Percent of Government revenue to Government expenditures (9÷7)
1938	4, 415 5, 586	-210 949	843 868	4, 848 7, 403	3, 997 4, 303	82 58	849 3, 100	18 42	885 1, 257	104 41
1940: I	1, 286 1, 399 3, 450 1, 451	102 178 294 435	193 205 227 243	1, 581 1, 712 1, 971 2, 129	1, 023 1, 076 1, 084 1, 120	65 62 55 53	558 646 887 1, 009	35 38 45 47	505 188 264 300	90 29 20 30 30

Source: Adapted from the White Paper, "Au Analysis of the Sources of War Finance and an Estimate of the National Income and Expenditures in 1938 and 1940."

swells the "savings" items. Only such savings as represent decreased consumption properly fill in the inflationary gap. Although personal savings at the rate of £640 million a year were important in preventing prices from going even higher than they did, these savings did not represent a reduction in monetary demand for goods, but resulted from an expansion of bank credit; personal savings amounted to only £150 million in 1938.15

In fact, it is known that credit was expanding rapidly; by the end of December 1940, total bank deposits were 25 percent above the prewar averages; current account deposits were up 40 percent (caused mostly by bank loans to Government). In the fiscal year 1940-41 bank credit was created to an average extent of about £33 million a month, and lent to the government. At the same time, notes in circulation increased about 10 percent. 18 (See fig. 10.)

Table 4.—Offsets to Government Expenditure, United

[Millions of pounds sterling]							
Item	September 1989 to	6 months ber 1 Februar	First 18 months				
	August 1940	Actual figures	Annual rate	of war			
Total Government expenditure	2, 597	2,074	4, 148	4, 671			
Offsets:  Revenue.  Draft on external capital.  Draft on domestic capital.  Extra-budgeting receipts.  Increase of tax accounts.  Savings of local authorities, institutions, and companies.  Personal savings.	1, 148 542 60 113 140 272 320	837 479 240 90 20 131 320	1, 674 958 480 180 - 40 262 640	1, 985 1, 021 300 203 120 403 640			
Total offsets	2, 595	2,077	4, 154	4,072			

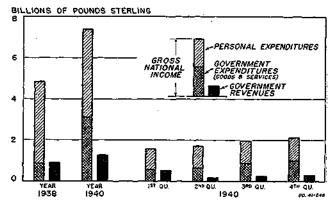
Source: Adapted by the Economist (Apr. 12, 1941) from figures given in the White

From this evidence, coupled with a price advance that did not consist solely of higher prices for imports, it may be concluded that the Government's fiscal program resulted in some measure of inflation during 1940. Despite the taxation and borrowing with which the Government balanced its budgetary accounts, private individuals were left with sufficient purchasing power for personal expenditures of £4,303 million in 1940, an increase of about 8 percent over expenditures in 1938. The volume of consumer's goods upon which this increased purchasing power was spent certainly was smaller in 1940 than in 1938, probably by 5 to 10 percent.17 Real savings and taxes were not increased sufficiently to cause a reduction in personal monetary expenditures appropriate to the reduction in volume of consumer goods, with the result that prices increased.

## The Current British Budget.

The budget of April 1940 sets out the fiscal plans for the ensuing year. Total expenditures are estimated at £4,207 million. "Domestic" expenditure (expenditure to be financed out of domestic sources) is estimated at £3,700 million (as compared with £2,055 million for the first year of war, and an annual rate of £3,190 million in the first half of the second year). Offsets of £3,158 million are contemplated; this includes revenue of £1,636 million and other offsets (including extrabudgetary receipts and borrowing from personal sav-

Figure 9.—Distribution of the Gross National Income in the United Kingdom



Source: Central Statistical Office, London.

ings) of £1,522 million. A gap of £542 million is left, which the Chancellor proposed to close by new taxes raising £252 million, and by additional personal savings of £200-£300 million. It is the task of the National Savings Committee to achieve the necessary stimulation of savings. Because of lend-lease aid, which is not included in the above figues, the budgetary problem is considerably lessened. Budgeted expenditures are only 16 percent over those of the first half of the second year of war. Since lend-lease goods enter the British economy without any corresponding flow of purchasing power into the market, the task of absorbing purchasing power through savings and taxes is lightened.

The additional taxes that are necessary will be raised by increasing the basic income tax rate from 42.5 percent to 50 percent (up to 10s. in the pound). The reduced rate applying to the first £165 (\$660) of taxable income was raised from 25 percent to 32.5 percent. The exemption limit was lowered from £120 to £110 (\$480) to \$440). The personal allowance of single taxpayers was lowered from £100 to £80 (\$400 to \$320), and of married taxpayers from £170 to £140 (\$680 to \$560). The earned income allowance was reduced from % of earned income (with a maximum of £250) to 1/10 (with a maximum of £150).

The increase in taxes resulting from the reduction in personal allowances and earned income allowances is put into Postal Savings, to be returned after the war-

<sup>15</sup> Economist, April 12, 1941.

Economist, June 21, 1941.
 Similarly, it can be calculated that total national monetary income, spent by Government and private individuals, increased 20 to 25 percent in the first year of the war, while total production increased only 5 to 10 percent. Cf. Pigou, op. cit.

(up to £65). This feature was obtained as an incident of tax collection, after it was rejected in 1940 when described as "compulsory savings" or "deferred pay." This compulsory savings feature will yield only £54 million in the current year, or £125 million in the full year—much less than was proposed by the Keynes plan of compulsory savings. In like fashion, 20 percent of the 100 percent excess-profits tax will be returned after the war, for reconstruction purposes.

#### Actual Fiscal Results in 1941.

Expenditures may well have been underestimated in the budget. Already, expenditures (from April to September 30, 1941) have been £2,236 million, or at an annual rate of £4,472 million as opposed to the estimate for the year of £4,207 million.<sup>19</sup> (See table 2.) Revenue, however, is ahead of the usual percentage of total estimated annual revenue; to September 30 it has been £737.5 million, or at a yearly rate of £1,475 million. In the first half of the current fiscal year, 41 percent of total estimated annual revenue has been received as compared with only 32 percent in the corresponding period last year. Revenue to date covers 33 percent of expenditure, while last year in the same period it covered only 29 percent.

The proportion of total expenditure met by ordinary revenue fell to 31 percent in September, as compared with 40.8 percent in August, while receipts from savings issues, large and small, dropped sharply after the heavy purchases of 2½ percent National War Bonds in the week before their suspension on August 14. As a result, the total from savings issues yielded only 17 percent of total expenditures in September as compared with 36 percent in August. It was necessary, therefore, for the Exchequer to resort to the largest monthly increase ever recorded in the Floating Debt, financing in this manner 50 percent of total expenditure during the month, as compared with only 15 percent thus financed in August.

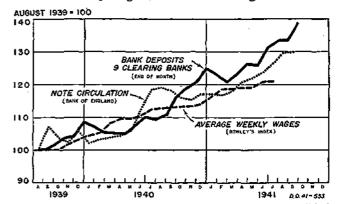
Bank credit is still increasing, as shown in figure 10. Deposits of London Clearing Banks increased about 13 percent during 1941, to September. Note circulation increased about 11 percent in the same period.

Despite the inflationary implications of rising expenditures, an increase in the Floating Debt, and an increase in bank deposits and note circulation, prices have been relatively stable in 1941. Wholesale prices rose only 3 percent through September, while the cost of living increased 1 percent. One reason for this is the Government expenditure of £100 million a year on subsidies, chiefly for food items. In respect to fiscal causes, however, the reason appears to be that the increase in bank credit has not as yet had its full effect on the demand for goods. Aggregate clearings in ten provincial banks increased only 2.4 percent in the period

January 1-September 13, 1941, compared with the same period in the previous year.

The voluntary limitation on spending that is reflected in these figures may be accounted for by an increased desire for liquidity, by patriotic response to "buy less" campaigns, and by the fact that it is becoming more difficult to spend, because of rationing. From the standpoint of avoiding inflation, it is just as efficacious for people to hold funds as to relinquish them to the government in taxes or loans. The only danger is that purchasing power retained in the hands of the public might come into the market at any time.

Figure 10.—Bank Deposits, Note Circulation, and Average Weekly Wages in the United Kingdom



Source: Indexes computed with August 1939 as base from data published in London and Cambridge Economic Service's Reports, Memorandum No. 87.

#### Control of Demand by Rationing.

Rationing tends to retard price advances by limiting the quantity of goods that may be demanded to the quantity available for sale. Increased price offers will not secure for a buyer more than his allotted share of a rationed good, hence the process of bidding up prices is minimized. Rationing by physical units cannot prevent price rises, when money incomes are expanding, but it can retard them.<sup>20</sup> One of the reasons that the unabsorbed excess of purchasing power has not exercised its full force to raise prices in 1941 is that Great Britain has been extending its rationing system.

## The Rise in Wages

A general increase in wages is an indirect cause of general price rises, operating through the direct causes

<sup>10 &</sup>quot;The British Budget, 1941-42," Foreign Commerce Weekly, July 12, 1941.

Dend-Lesse expenditures are not included in these figures.

<sup>29</sup> The effects of rationing on prices are complex. The degree of monopoly is significant, for a monopolist may secure higher prices by restricting the supply, even under a rationing system. His most profitable price would not typically be so high under rationing, however, for units (in excess of the ration) that might be demanded at high prices by some buyers cannot be sold to them, hence under rationing a lower price must be set in order to sell a given quantity of goods. The degree of homogeneity of the product is also a relevant factor. When the rationing is by physical units (as assumed in the case above), there is a tendency for a relative increase in the demand for the higher-quality varieties. Where rationing is by value, e.g., in the case of meat in Great Britain, there is increased demand for the lower-priced varieties. In the case of rationing by value, the government may exercise considerable control over prices by adjusting the total monetary expenditure on the good to the available supply. Consideration is being given in Great Britain to a rationing plan that would control the general price level by limiting the total amount of money that a person could spend on all goods, while permitting greater freedom in the choice of goods. See M. Kalecki, "General Rationing," Institute of Statistics, Oxford, Bulletin, Vol. 3, No. 1.

discussed above. In Great Britain higher wages constitute a basis for higher permitted prices for commodities under price control. Government expenditures are increased by these higher prices, and under the British tax system it becomes more difficult for the Government to "soak up" the increased purchasing power. An advance in profits can be recaptured by the excess-profits tax, but an increase in wages may largely be "free" purchasing power, for direct taxes take only a small proportion of incomes in the lower brackets.

Although the wage rates of some 2½ million workers are linked by contract to the cost-of-living index, British wages in general have not increased in proportion to the increase in prices. Professor Bowley's index of average weekly wage rates has risen about 20 percent from August 1939 to July 1941 (fig. 10). In the same period the cost-of-living index rose about 30 percent. Average earnings of labor increased more than wage rates because of an increase in the number of hours worked. Even earnings, however, have not kept pace with the increase in cost of living.<sup>21</sup>

The Government White Paper on finance <sup>22</sup> reports that labor's share of the national income (before direct taxes) increased from 41 percent in 1938 to 44½ percent in 1940. Pay of the armed forces was included as wages in this calculation. Excluding such pay, labor's share of the national income dropped from 41 percent to 40 percent, while profits and interest (before direct taxes) increased from 27 percent of the national income to 29 percent.<sup>23</sup>

In July 1941 the Government issued a White Paper stating the position that an attempt by labor to maintain real income unchanged through wage advances is doomed to defeat, as consumption must decrease with an increased share of the national income being diverted to the war aim. Increased wages, it was pointed out, must in these circumstances be matched by a rise in prices, resulting in an upward wage-price spiral.<sup>24</sup>

The Government suggestion for voluntary stabilization of wages through negotiation by joint voluntary councils met with a negative response from the Trades Union Congress, which stands opposed to wage stabilization. To meet the inflationary dangers pointed out in the White Paper, the General Council of the Trades Union Congress urges an extension of rationing and direct price control, as well as the stimulation of maximum savings.

# Results of Efforts To Control the General Price Level

As a result of the various indirect controls discussed

above, and of subsidies and direct price control, the official price indexes in Great Britain have leveled off. In the United States, from January to September 1941, wholesale prices advanced about 13 percent, and the cost of living rose about 7 percent. The comparison is not very meaningful, of course, because rationing and the shortage of supply restrict British consumers in their purchases of the more important items.<sup>25</sup>

The chief causes of the rapid increases in the price indexes in the early months of the war have been reasonably well controlled by purchase contracts with the sterling area countries, stabilization of the foreign exchange rates, and requisition of British vessels. The further substantial price advances in 1940 were caused primarily by a decrease in civilian supplies and an increase in purchasing power. Efforts have been made to augment supplies by increasing domestic production and by heavier imports from the sterling area countries and the United States. The lend-lease program has removed the financial and legal obstacles to securing supplies from the United States, and while actual receipts in the United Kingdom have not been large (with the exception of protein foodstuffs), there is no question but lend-lease aid will be of great significance in respect to future supplies. The effect of lend-lease aid in retarding British price advances is especially important in that it provides for a substantial volume of consumers' goods and war material without an increase in the amount of purchasing power in the market.

The increase in money incomes resulting from increased expenditures of the Government has to some extent been offset by heavier taxes and increased savings, but it appears that some inflationary gap may yet remain. The excess of expenditure over the budget estimates and over revenue continues to mount, and a decreasing proportion of this deficit is financed by drawing directly on personal savings. Consequently, bank credit continues to expand. The stability of bank clearings, however, indicates that the expansion of bank deposits has not resulted in a corresponding increase in active spending.

The Government's efforts to stabilize prices are especially directed at the staple items that for the most part are those that comprise the cost-of-living index, because demands for wage increases are related to the movements of this index. To the extent that the various indirect controls discussed above may prove inadequate for the task, it may be expected that greater emphasis will be placed upon the use of subsidies, rationing, and direct price control.

<sup>&</sup>quot;J. L. Nicholson, "The Trend of Wages," Institute of Statistics, Oxford, Bulletin, Vol. 3, No. 11, August 9, 1941.

<sup>&</sup>quot;"An Analysis of the Sources of War Finance and an Estimate of the National Income and Expenditure in 1938 and 1940."

Kalder, op. cit.

<sup>\* &</sup>quot;Price Stabilization and Industrial Policy," Cmd. 6294, July 1941.

<sup>23</sup> The value of the British indexes as measures of change under present conditions is limited, since their weighting is based on pre-war conditions, and they do not reflect the radical alterations in the relative supplies of different commodities and changes in their quality. Despite these shortcomings the indexes are useful as an approximate measure of the broad movements of prices.